

2021-2022

**Administered
Unassigned Asthma
Medication in Schools
Report**



TEXAS
Health and Human
Services

Texas Department of State
Health Services

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Executive Summary

[Texas Education Code, Chapter 38, Subchapter E](#) authorizes and sets standards when using prescription asthma medicine on school campuses. Effective February 2021, the [Texas Administrative Code, Subchapter D, Title 25, Part 1, Chapter 40, Section 40.47](#) requires a school district or school campus that adopts an asthma medication policy to report the use of asthma medication.

The school must submit a report within 10 business days to the:

- school district,
- charter holder if the school is an open-enrollment charter school or governing body of the school if the school is a private school,
- physician or other person who prescribed the asthma medication,
- student's healthcare provider, and
- commissioner of the Texas Department of State Health Services (DSHS).

The DSHS School Health Program and the DSHS Chronic Disease Epidemiology Branch (CDE) analyzed the reported data. Schools submitted the data through the *Required Reporting of Administered Unassigned Asthma Medication to DSHS* web form ([Appendix A](#)).

During the 2021-2022 school year, 379 uses of an asthma medication in a school were reported. Individuals received Albuterol, which was administered by Metered Dose Inhalers (MDI) (88.1%) or nebulized solutions by a nurse (11.6%). Most individuals who received the asthma medication had a known history of asthma. Most individuals experienced trouble breathing or shortness of breath (73.9%), wheezing (63.6%), or frequent coughing (47%). Exercise was the most common reported cause or trigger (56.7%).

This report includes data from August 2021 to July 2022. It is important to note that Texas schools were impacted by the COVID-19 pandemic. Thus, asthma medication needs and reporting may have been affected by the pandemic due to school closures, reduced in-person attendance and the availability of virtual learning.

Introduction

[Texas Education Code, Chapter 38, Subchapter E](#) authorizes and sets standards when using prescription asthma medicine on school campuses. Effective February 2021¹, the [Texas Administrative Code, Subchapter D, Title 25, Part 1, Chapter 40, Section 40.47](#) required a school district, open-enrollment charter school, or private school that adopts an asthma medication policy to report the use of an asthma medication.

The school must submit a report within 10 business days to the:

- school district,
- charter holder if the school is an open-enrollment charter school or the governing body of the school if the school is a private school,
- physician or other person who prescribed the asthma medication,
- student's primary healthcare provider, and
- commissioner of the Texas Department of State Health Services.

The DSHS School Health Program and the DSHS Chronic Disease Epidemiology Branch (CDE) analyzed the reported data. Schools submitted the data through the *Required Reporting of Administered Unassigned Asthma Medication to DSHS* web form ([Appendix A](#)) during the 2021-2022 school year.

The purpose of this report is to understand the use of asthma medication in schools across Texas. This information will be used by DSHS and the Stock Epinephrine Advisory Committee (SEAC) to inform future program activities and areas of focus. SEAC members are highly specialized in the asthma field and have provided great insight into asthma medication administration in the school setting. Even though [Texas Education Code, Chapter 38, Subchapter E, Section 38.202](#) does not explicitly establish the committee to examine and review the administration of unassigned asthma medication,

¹ [House Bill \(HB\) 2243, 86th Legislative Session, 2019](#), allowed schools to adopt an asthma medication policy and the adopted rule required the report use of asthma medication.

DSHS uses SEAC subject matter expertise to best implement the unassigned asthma medication statute. DSHS doesn't have a committee specifically for asthma. In addition, the reporting requirements for unassigned asthma medication in [Texas Administrative Code, Subchapter D, Title 25, Part 1, Chapter 40, Section 40.47](#) parallel the reporting requirements of unassigned epinephrine auto-injectors in [Texas Administrative Code, Subchapter U, Title 25, Part 1, Chapter 37, Section 37.608](#).

Methods

School health services personnel used the *Required Reporting of Administered Unassigned Asthma Medication to DSHS* web form to report when asthma medication was administered. This action is required no later than 10 business days after the date a school nurse administered unassigned asthma medication in a school ([Appendix A](#)). The web form consists of 16 questions, including nine open-ended question, five multiple-choice and two multi-select questions. The web form can be found on the [DSHS website](#).

The data from the web form was assembled by the School Health Program staff. In August 2022, a CDE program evaluator analyzed the records submitted between August 2021 to July 2022 using Microsoft Excel.

Results

A total of 379 records were submitted during this period. Eleven independent school districts (ISD) and one charter school submitted records. Education Service Center (ESC) Region 11 submitted the most reports (84.4%) ([Appendix B](#)).

Table 1 shows the frequency and percent of responses to each question on the web form. Nearly all individuals (99.7%) received the medication Albuterol. The majority of individuals received the medication at the nurse’s office (86.5%) and most medication was administered by Metered Dose Inhalers (MDI) (88.1%).

Most individuals (90.8%) who received the unassigned asthma medication had a known history of asthma. Parents or guardians were notified in 99.5% of the occurrences when asthma medication was administered. The prescribing physician was notified in 65.2% of the cases. After receiving the medication, approximately three quarters (74.7%) of students returned to class.

Table 1: Frequency and Percent of Asthma Medication Use in Texas Schools¹ (n=379)

Questions	Answers	Frequency (n)	Percent (%)
Education Service Center (ESC) Regions	Region 10	30	7.9
	Region 11	320	84.4
	Region 13	1	0.3
	Region 14	4	1.1
	Region 20	24	6.3
Location Administered	Nurse’s Office	328	86.5
	Clinic	46	12.1
	Recess	3	0.8
	Other	2	0.6
Name of Medication	Albuterol/Albuterol Sulfate	378	99.7
	Unknown	1	0.3

Questions	Answers	Frequency (n)	Percent (%)
Method Administered	Metered-Dose Inhalers (MDI)	334	88.1
	Nebulized Solution	44	11.6
	Both	1	0.3
Doses Administered	One	289	76.3
	Two	85	22.4
	Three	1	0.3
	Four	4	1.0
History of Asthma	Yes	344	90.8
	No	35	9.2
Notified	Parent or guardian	377	99.5
	Prescribing physician	247	65.2
	Primary healthcare provider	125	33.0
After Receiving the Asthma Medication	Returned to class	283	74.7
	Parent or guardian picked up student and took them to a healthcare provider	35	9.2
	Parent or guardian picked up student and took them home	34	9.0
	Parent or guardian picked up student, but unknown if they got medical care.	24	6.3
	Called 911 and student went by EMS to emergency room	2	0.5
	Other (Unknown)	1	0.3
	Total		379

¹ Respondents could select all that apply for the “Notified” category. Therefore, the total frequency for this category will not equal to 379, and the total percent for this category will not equal to 100. The unassigned asthma medication is prescribed to the school and not a specific student. Texas Education Code, Section 38.209 relates to unassigned asthma medication. Respondents that selected clinic indicated nurse clinic, campus clinic, or school clinic. Recess also includes gym or playground.

Table 2 shows the frequency and percent of the reported signs and symptoms experienced by the individuals who received the asthma medication. Respondents could select all the symptoms that applied. Most individuals experienced trouble breathing or shortness of breath (73.9%) and wheezing (63.6%). Fewer individuals experienced frequent coughing (47.0%), chest tightness (33.5%), runny nose and watery eyes (6.3%) or a confirmed diagnosis of a viral respiratory infection (2.4%).

Some respondents (16.4%) indicated “other” symptoms. Respondents noted that the individual experienced low oxygen levels, fever, seizure, trouble speaking, pale or blue lips, vomiting, high or abnormal heart rate, COVID-19, diminished lung sounds, nasal congestion, restlessness, stridor (noisy breathing), or retractions.

Table 2: Frequency and Percent of Symptom Information¹

Symptoms	Frequency (n)	Percent (%)
Trouble breathing or shortness of breath	280	73.9
Wheezing	241	63.6
Frequent coughing	178	47.0
Chest tightness	127	33.5
Other	62	16.4
Runny nose and watery eyes	24	6.3
Confirmed diagnosis of viral respiratory infection	9	2.4
N/A (no respiratory symptoms)	1	0.3

¹Respondents could select all symptoms that apply. Therefore, the total frequency will not equal to 379, and the total percent will not equal to 100.

Table 3 shows the suspected causes or triggers. Respondents could select all the suspected triggers that applied. Over half (56.7%) of the cases were suspected to be due to exercise (i.e., walking, climbing stairs, intense exercise, or sports) while 33% was due to weather or air pollution (i.e., cold, windy, stormy weather, extreme temperature changes, high humidity, air pollution, smog, vehicle exhaust and fumes).

Fewer respondents selected unknown (17.7%), pollen including weeds, trees, grass, or flowers (15.0%), respiratory infections such as cold, flu, bronchitis, or sinus infection (9.8%), or emotions including include laughing or crying too hard, feeling stressed or anxious, anger, fear or yelling (2.4%).

Sixteen respondents selected “other” and indicated COVID-19 or additional suspected causes or triggers.

Table 3: Frequency and Percent of Suspected Cause¹

Suspected Cause	Frequency (n)	Percent (%)
Exercise	215	56.7
Weather or air pollution	125	33.0
Unknown	67	17.7
Pollen	57	15.0
Respiratory infections	37	9.8
Other	16	4.2
Emotions	9	2.4
Food allergies	3	0.8
Smoke	3	0.8
Pests	1	0.3
Animals	1	0.3
Strong odor	1	0.3

¹Respondents could select all suspected causes that apply. Therefore, the total frequency will not equal to 379, and the total percent will not equal to 100. Food allergies include peanuts, eggs, milk, tree nuts, fish, shellfish, wheat or soy. Smoke includes cigarette, cigar, pipe smoke, wood-burning fireplaces, burning leaves, campfire, second-hand smoke. Pests include dust mites, rodents, cockroaches. Animals include pet dander, saliva, or pet allergens. Strong odor includes scents from perfumes, deodorants, cleaning supplies, gas stoves, scented candles or incense, hairspray, air fresheners, personal care products.

Analysis and Discussion

During the 2020-2021 school year, a total of 379 uses of unassigned asthma medication in a school were reported to DSHS. Nearly all individuals received the medication Albuterol, which was administered by Metered Dose Inhalers (MDI) method by a nurse ([Table 1](#)). Most individuals who received the asthma medication had a known history of asthma. In almost all cases, the parents or guardians were notified. A few respondents indicated the individual who received the medication had no known history of asthma, which is in conflict with [Texas Education Code, Section 38.208 \(b-1\)](#). The majority of medication recipients experienced trouble breathing or shortness of breath and wheezing. Exercise was the most reported cause or trigger.

It is important to note that administered asthma medication reporting may have been affected by the COVID-19 pandemic. Schools had reduced in-person attendance and virtual learning was more available during this school year.

Data in this report can help to monitor and guide future reporting and projects for asthma control in schools. These projects may include outreach to school health program networks and collaboration with the DSHS Asthma Program.

Conclusion

The purpose of this report is to understand the use of the unassigned asthma medication in schools across Texas. The report will be used by DSHS and the Stock Epinephrine Advisory Committee to inform future program activities and areas of focus.

List of Acronyms

Acronym	Full Name
DSHS	Texas Department of State Health Services
CDE	Chronic Disease Epidemiology
MDI	Metered Dose Inhalers
ISD	Independent School District
ESC	Education Service Center

General Information

Contact Information

Texas School Health Program
Community Health Worker and School Health Branch
Health Promotion and Chronic Disease Prevention Section
PO Box 149347, MC 1945
Austin, TX 78714-9347
1100 West 49th Street
Austin, Texas 78756
Email: schoolhealth@dshs.texas.gov
Phone: 512-776-7279
dshs.texas.gov/schoolhealth/

Author Information

Prepared by Calandra Jones, MPH
Program Evaluator
Chronic Disease Epidemiology
Health Promotion and Chronic Disease Prevention Section

Reviewed by Justin Buendia, PhD
Manager
Chronic Disease Epidemiology
Health Promotion and Chronic Disease Prevention Section

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Appendix A. Required Reporting of Administered Unassigned Asthma Medication to DSHS

Required Reporting of Administered Unassigned Asthma Medication to DSHS

If you are a school district, open-enrollment charter school, or private school there are reporting rules. The rules apply to unassigned asthma medication. The rule says you must report the administration of unassigned asthma medication. This requirement is in the Texas Administrative Code, Subchapter D, Title 25, Part 1, Chapter 40, [Section 40.47](#).

Your campus must submit a report no later than the 10th business day after the date a school nurse administers unassigned asthma medication. You must send the report to the:

- school administrator,
- prescribing physician,
- student's primary healthcare provider, and
- commissioner of the Department of State Health Services (DSHS).

You must save a copy of the report in the student's permanent record.

Submission of this electronic form meets the reporting requirement for DSHS. Be sure to report complete and accurate information.

Please fill out the entire form and provide detailed information.

All fields with an asterisk () must be completed.*

Certain Entity/Venue Information

Remember to report this information to the school administrator, the prescribing physician and the student's primary healthcare provider and keep a copy in the student's permanent record.

Name of school district, open-enrollment charter school, or private school: *

Spell out the school district, open-enrollment charter school, or private school's name.

Do not use an abbreviation.

[Education Service Center Region](#) for the school district, open-enrollment charter school, or private school: *

Email address of person completing this form:*

Location and Dosage Information

List the physical location where you administered the asthma medication:*

(Examples: nurse's office, classroom, hallway, etc. A mailing address is not needed.)



Name of medication: *

Administered by Metered Dose Inhaler (MDI) or Nebulized Solution:

Number of doses administered:*

(Example: 2 puffs = 1 dose)

Date administered:*

[None]  

Title and name of person who administered the asthma medication: *

(Must be a school nurse, as defined by statute: [School nurse](#)--Registered nurse, as defined in [19 TAC §153.1022](#), authorized to administer asthma medication, or licensed vocational nurse working under supervision as described in [Texas Occupations Code §301.353](#).)

Other Information

Did the student who got the asthma medication have a history of asthma? *	<input type="radio"/> Yes <input type="radio"/> No
Did you notify the parent or guardian after the asthma medication was administered? *	<input type="radio"/> Yes <input type="radio"/> No
Did you notify the prescribing physician when the asthma medication after the medication was administered? *	<input type="radio"/> Yes <input type="radio"/> No
Did you notify the student's primary health care provider when you administered the asthma medication? *	<input type="radio"/> Yes <input type="radio"/> No
After the student got the asthma medication the student: *	<input type="radio"/> Returned to class. <input type="radio"/> Parent or guardian picked up student and took them home. <input type="radio"/> Parent or guardian picked up student and took them to a healthcare provider. <input type="radio"/> Parent or guardian picked up student, but unknown if they got medical care. <input type="radio"/> We called 911 and student went by EMS to the emergency room. <input type="radio"/> Other (Unknown)

Symptom Information

Please select the symptoms the individual who got the unassigned asthma medication was exhibiting. **Mark all that apply.**

If no respiratory symptoms occurred, choose "N/A" and write symptoms in the "other" category. *

- Wheezing
- Frequent coughing
- Trouble breathing or shortness of breath
- Chest tightness
- Runny nose and watery eyes
- Confirmed diagnosis of a viral respiratory infection
- N/A (no respiratory symptoms)
- Other

Please list signs or symptoms not listed above, if applicable:

Suspected Asthma Triggers

Please indicate the suspected cause or trigger of the asthma attack
(Check all that apply*):

- Respiratory infections such as a cold, flu, or sinus infection
- Exercise (walking, climbing stairs, intense exercise, sports)
- Emotions (laughing or crying too hard, feeling stressed or anxious, anger, fear, yelling)
- Medicines (aspirin, fever reducers, anti-inflammatories, alternative therapies, herbal remedies)
- Food allergies (peanuts, eggs, milk, tree nuts, fish, shellfish, wheat or soy)
- Smoke (cigarette, cigar, pipe smoke, wood-burning fireplaces, burning leaves, campfire, second-hand smoke)
- Weather or air pollution (cold, windy, stormy weather, extreme temperature changes, high humidity, air pollution, smog, vehicle exhaust and fumes)
- Pollen (weeds, trees, grass, flowers)
- Animals (dander, saliva, pet allergens)
- Pests (dust mites, rodents, cockroaches)
- Mold
- Strong odor (scents from perfumes, deodorants, cleaning supplies, gas stoves, scented candles or incense, hairspray, air fresheners, personal care products)
- Unknown
- Other

If you selected "Other", please explain *:

Remember to replace the unassigned asthma medication and the equipment used to administer the medication.

If you used a metered dose inhaler, make sure you wipe it down with a sterilizing solution.



I'm not a robot

Submit Request

Clear Form

Appendix B: Regional Education Service Center Map



School Health Program

dshs.texas.gov/schoolhealth